As discussed before, another way to look at disease prevalence is to count as a case any mention of a condition in any of the three diagnostic categories. Table 7 shows the results by race for four diagnoses and one combination. Prevalence is much higher than that reflected in Table 6, and about five times as high for hypertension. The racial differentials still hold. Since nonwhites generally have less access to the health care system than whites, the patterns shown here probably understate a presumed greater incidence of hypertension and diabetes among nonwhites. Also, among those people who do reach the hospital, disease incidence shown here reflects only those conditions that get coded onto the medical record, and so there is some degree of understatement. For hypertension in particular there would seem to be understatement, since the primary diagnosis might be "hypertensive heart disease," which would be recorded as heart disease, but a separate hypertension code may not be put on the record. In sum, these data better indicate relative differences than absolute levels of disease.

Table 7
Hospital Discharges Per 100,000 Population:
Disease Mentioned in Any of Three Diagnoses
North Carolina, 1978 (Annualized)

	White	Nonwhite
Heart Disease	1,768	1,252
Cerebrovascular Disease	462	408
Hypertension	449	685
Diabetes	556	760
Hypertension and Diabetes	56	133

## Discussion

While the preceding has shown several ways that hospital discharge data can be used to estimate morbidity, it should be reiterated that the results cannot be generalized to non-hospitalized patients. Patients choose or are referred to hospitals in a nonrandom fashion, and disease patterns among the hospitalized do not simply reflect morbidity in the community at large (3,4). As well as having more serious diseases, hospitalized patients tend to have more disease combinations than nonhospitalized patients. Hospital data should not be taken to indicate the general incidence of a disease, except for those diseases where virtually all patients with the disease require hospitalization. However, hospital data should be a better measure of disease incidence than death data. The above breakdown of diagnosis data by race suggests that nonwhites have a higher incidence of hypertension and diabetes, but other factors could account for some of the difference. For example, home and other outpatient care may be less likely for nonwhites, who on the average are of lower socioeconomic status, and this could produce more hospitalization without more disease. The major point is that hospital data represent only a part of the total morbidity picture and should be used with care when making inferences about sickness in the population.

A potential problem with the data used in this report is that multiple hospitalizations by the same person are reflected in the annual estimates. The Capital